

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 09/445, 289 F
Source: JFC016
Date Processed by STIC: 11/01/2006

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IFW16

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/445,289F

DATE: 11/01/2006
TIME: 11:44:49

Input Set : A:\60261499.app
Output Set: N:\CRF4\11012006\I445289F.raw

3 <110> APPLICANT: MUKAMOLOVA, GALINA V.
4 KAPRELYANTS, ARSENY S.
5 YOUNG, DANIELLE I.
6 KELL, DOUGLAS B.
7 YOUNG, MICHAEL
9 <120> TITLE OF INVENTION: BACTERIAL PHEROMONES AND USES THEREFOR
11 <130> FILE REFERENCE: 49946-60261
13 <140> CURRENT APPLICATION NUMBER: 09/445,289F
14 <141> CURRENT FILING DATE: 2000-05-11
16 <150> PRIOR APPLICATION NUMBER: PCT/GB98/01619
17 <151> PRIOR FILING DATE: 1998-06-03
19 <150> PRIOR APPLICATION NUMBER: GB 9711389.8
20 <151> PRIOR FILING DATE: 1997-06-04
22 <150> PRIOR APPLICATION NUMBER: GB 9811221.2
23 <151> PRIOR FILING DATE: 1998-05-27
25 <160> NUMBER OF SEQ ID NOS: 63
27 <170> SOFTWARE: PatentIn Ver. 3.3
29 <210> SEQ ID NO: 1
30 <211> LENGTH: 362
31 <212> TYPE: PRT
32 <213> ORGANISM: Mycobacterium tuberculosis
34 <400> SEQUENCE: 1
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36 1 5 10 15
38 Gly Gly Tyr Ala Val Ala Ala Cys Lys Thr Val Thr Leu Thr Val Asp
39 20 25 30
41 Gly Thr Ala Met Arg Val Thr Thr Met Lys Ser Arg Val Ile Asp Ile
42 35 40 45
44 Val Glu Glu Asn Gly Phe Ser Val Asp Asp Arg Asp Asp Leu Tyr Pro
45 50 55 60
47 Ala Ala Gly Val Gln Val His Asp Ala Asp Thr Ile Val Leu Arg Arg
48 65 70 75 80
50 Ser Arg Pro Leu Gln Ile Ser Leu Asp Gly His Asp Ala Lys Gln Val
51 85 90 95
53 Trp Thr Thr Ala Ser Thr Val Asp Glu Ala Leu Ala Gln Leu Ala Met
54 100 105 110
56 Thr Asp Thr Ala Pro Ala Ala Ser Arg Ala Ser Arg Val Pro Leu
57 115 120 125
59 Ser Gly Met Ala Leu Pro Val Val Ser Ala Lys Thr Val Gln Leu Asn
60 130 135 140
62 Asp Gly Gly Leu Val Arg Thr Val His Leu Pro Ala Pro Asn Val Ala
63 145 150 155 160
65 Gly Leu Leu Ser Ala Ala Gly Val Pro Leu Leu Gln Ser Asp His Val

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66 165 170 175
 68 Val Pro Ala Ala Thr Ala Pro Ile Val Glu Gly Met Gln Ile Gln Val
 69 180 185 190
 71 Thr Arg Asn Arg Ile Lys Lys Val Thr Glu Arg Leu Pro Leu Pro Pro
 72 195 200 205
 74 Asn Ala Arg Arg Val Glu Asp Pro Glu Met Asn Met Ser Arg Glu Val
 75 210 215 220
 77 Val Glu Asp Pro Gly Val Pro Gly Thr Gln Asp Val Thr Phe Ala Val
 78 225 230 235 240
 80 Ala Glu Val Asn Gly Val Glu Thr Gly Arg Leu Pro Val Ala Asn Val
 81 245 250 255
 83 Val Val Thr Pro Ala His Glu Ala Val Val Arg Val Gly Thr Lys Pro
 84 260 265 270
 86 Gly Thr Glu Val Pro Pro Val Ile Asp Gly Ser Ile Trp Asp Ala Ile
 87 275 280 285
 89 Ala Gly Cys Glu Ala Gly Gly Asn Trp Ala Ile Asn Thr Gly Asn Gly
 90 290 295 300
 92 Tyr Tyr Gly Gly Val Gln Phe Asp Gln Gly Thr Trp Glu Ala Asn Gly
 93 305 310 315 320
 95 Gly Leu Arg Tyr Ala Pro Arg Ala Asp Leu Ala Thr Arg Glu Glu Gln
 96 325 330 335
 98 Ile Ala Val Ala Glu Val Thr Arg Leu Arg Gln Gly Trp Gly Ala Trp
 99 340 345 350
 101 Pro Val Cys Ala Ala Arg Ala Gly Ala Arg
 102 355 360
 105 <210> SEQ ID NO: 2
 106 <211> LENGTH: 188
 107 <212> TYPE: PRT
 108 <213> ORGANISM: Mycobacterium tuberculosis
 110 <400> SEQUENCE: 2
 111 Met Pro Val Gly Trp Leu Trp Arg Ala Arg Thr Ala Lys Gly Thr Thr
 112 1 5 10 15
 114 Leu Lys Asn Ala Arg Thr Thr Leu Ile Ala Ala Ala Ile Ala Gly Thr
 115 20 25 30
 117 Leu Val Thr Thr Ser Pro Ala Gly Ile Ala Asn Ala Asp Asp Ala Gly
 118 35 40 45
 120 Leu Asp Pro Asn Ala Ala Gly Pro Asp Ala Val Gly Phe Asp Pro
 121 50 55 60
 123 Asn Leu Pro Pro Ala Pro Asp Ala Ala Pro Val Asp Thr Pro Pro Ala
 124 65 70 75 80
 126 Pro Glu Asp Ala Gly Phe Asp Pro Asn Leu Pro Pro Pro Leu Ala Pro
 127 85 90 95
 129 Asp Phe Leu Ser Pro Pro Ala Glu Glu Ala Pro Pro Val Pro Val Ala
 130 100 105 110
 132 Tyr Ser Val Asn Trp Asp Ala Ile Ala Gln Cys Glu Ser Gly Gly Asn
 133 115 120 125
 135 Trp Ser Ile Asn Thr Gly Asn Gly Tyr Tyr Gly Gly Leu Arg Phe Thr
 136 130 135 140
 138 Ala Gly Thr Trp Arg Ala Asn Gly Gly Ser Gly Ser Ala Ala Asn Ala

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139 145 150 155 160
141 Ser Arg Glu Glu Gln Ile Arg Val Ala Glu Asn Val Leu Arg Ser Gln
142 165 170 175
144 Gly Ile Arg Ala Trp Pro Val Cys Gly Arg Arg Gly
145 180 185
148 <210> SEQ ID NO: 3
149 <211> LENGTH: 174
150 <212> TYPE: PRT
151 <213> ORGANISM: Mycobacterium leprae
153 <400> SEQUENCE: 3
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155 1 5 10 15
157 Lys Ile Thr Phe Thr Gly Ala Met Leu Asp Gly Ser Ile Ala Leu Ala
158 20 25 30
160 Gly Gln Ala Ser Pro Ala Thr Asp Ser Glu Trp Asp Gln Val Ala Arg
161 35 40 45
163 Cys Glu Ser Gly Gly Asn Trp Ser Ile Asn Thr Gly Asn Gly Tyr Leu
164 50 55 60
166 Gly Gly Leu Gln Phe Ser Gln Gly Thr Trp Ala Ser His Gly Gly
167 65 70 75 80
169 Glu Tyr Ala Pro Ser Ala Gln Leu Ala Thr Arg Glu Gln Gln Ile Ala
170 85 90 95
172 Val Ala Glu Arg Val Leu Ala Thr Gln Gly Ser Gly Ala Trp Pro Ala
173 100 105 110
175 Cys Gly His Gly Leu Ser Gly Pro Ser Leu Gln Glu Val Leu Pro Ala
176 115 120 125
178 Gly Met Gly Ala Pro Trp Ile Asn Gly Ala Pro Ala Pro Leu Ala Pro
179 130 135 140
181 Pro Pro Pro Ala Glu Pro Ala Pro Pro Gln Pro Pro Ala Asp Asn Phe
182 145 150 155 160
184 Pro Pro Thr Pro Gly Asp Val Pro Ser Pro Leu Ala Arg Pro
185 165 170
188 <210> SEQ ID NO: 4
189 <211> LENGTH: 407
190 <212> TYPE: PRT
191 <213> ORGANISM: Mycobacterium tuberculosis
193 <400> SEQUENCE: 4
194 Met Ser Gly Arg His Arg Lys Pro Thr Thr Ser Asn Val Ser Val Ala
195 1 5 10 15
197 Lys Ile Ala Phe Thr Gly Ala Val Leu Gly Gly Gly Gly Ile Ala Met
198 20 25 30
200 Ala Ala Gln Ala Thr Ala Ala Thr Asp Gly Glu Trp Asp Gln Val Ala
201 35 40 45
203 Arg Cys Glu Ser Gly Gly Asn Trp Ser Ile Asn Thr Gly Asn Gly Tyr
204 50 55 60
206 Leu Gly Gly Leu Gln Phe Thr Gln Ser Thr Trp Ala Ala His Gly Gly
207 65 70 75 80
209 Gly Glu Phe Ala Pro Ser Ala Gln Leu Ala Ser Arg Glu Gln Gln Ile
210 85 90 95

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212 Ala Val Gly Glu Arg Val Leu Ala Thr Gln Gly Arg Gly Ala Trp Pro
213 100 105 110
215 Val Cys Gly Arg Gly Leu Ser Asn Ala Thr Pro Arg Glu Val Leu Pro
216 115 120 125
218 Ala Ser Ala Ala Met Asp Ala Pro Leu Asp Ala Ala Val Asn Gly
219 130 135 140
221 Glu Pro Ala Pro Leu Ala Pro Pro Pro Ala Asp Pro Ala Pro Pro Val
222 145 150 155 160
224 Glu Leu Ala Ala Asn Asp Leu Pro Ala Pro Leu Gly Glu Pro Leu Pro
225 165 170 175
227 Ala Ala Pro Ala Asp Pro Ala Pro Pro Ala Asp Leu Ala Pro Pro Ala
228 180 185 190
230 Pro Ala Asp Val Ala Pro Pro Val Glu Leu Ala Val Asn Asp Leu Pro
231 195 200 205
233 Ala Pro Leu Gly Glu Pro Leu Pro Ala Ala Pro Ala Asp Pro Ala Pro
234 210 215 220
236 Pro Ala Asp Leu Ala Pro Pro Ala Pro Ala Asp Leu Ala Pro Pro Ala
237 225 230 235 240
239 Pro Ala Asp Leu Ala Pro Pro Ala Pro Ala Asp Leu Ala Pro Pro Val
240 245 250 255
242 Glu Leu Ala Val Asn Asp Leu Pro Ala Pro Leu Gly Glu Pro Leu Pro
243 260 265 270
245 Ala Ala Pro Ala Glu Leu Ala Pro Pro Ala Asp Leu Ala Pro Ala Ser
246 275 280 285
248 Ala Asp Leu Ala Pro Pro Ala Pro Ala Asp Leu Ala Pro Pro Ala Pro
249 290 295 300
251 Ala Glu Leu Ala Pro Pro Ala Pro Ala Asp Leu Ala Pro Pro Ala Ala
252 305 310 315 320
254 Val Asn Glu Gln Thr Ala Pro Gly Asp Gln Pro Ala Thr Ala Pro Gly
255 325 330 335
257 Gly Pro Val Gly Leu Ala Thr Asp Leu Glu Leu Pro Glu Pro Asp Pro
258 340 345 350
260 Gln Pro Ala Asp Ala Pro Pro Pro Gly Asp Val Thr Glu Ala Pro Ala
261 355 360 365
263 Glu Thr Pro Gln Val Ser Asn Ile Ala Tyr Thr Lys Lys Leu Trp Gln
264 370 375 380
266 Ala Ile Arg Ala Gln Asp Val Cys Gly Asn Asp Ala Leu Asp Ser Leu
267 385 390 395 400
269 Ala Gln Pro Tyr Val Ile Gly
270 405
273 <210> SEQ ID NO: 5
274 <211> LENGTH: 155
275 <212> TYPE: PRT
276 <213> ORGANISM: Mycobacterium leprae
278 <400> SEQUENCE: 5
279 Met Pro Gly Glu Met Leu Asp Val Arg Lys Leu Cys Lys Leu Phe Val
280 1 5 10 15
282 Lys Ser Ala Val Val Ser Gly Ile Val Thr Ala Ser Met Ala Leu Ser
283 20 25 30

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Input Set : A:\60261499.app
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285 Thr Ser Thr Gly Met Ala Asn Ala Val Pro Arg Glu Pro Asn Trp Asp
286 35 40 45
288 Ala Val Ala Gln Cys Glu Ser Gly Arg Asn Trp Arg Ala Asn Thr Gly
289 50 55 60
291 Asn Gly Phe Tyr Gly Gly Leu Gln Phe Lys Pro Thr Ile Trp Ala Arg
292 65 70 75 80
294 Tyr Gly Gly Val Gly Asn Pro Ala Gly Ala Ser Arg Glu Gln Gln Ile
295 85 90 95
297 Thr Val Ala Asn Arg Val Leu Ala Asp Gln Gly Leu Asp Ala Trp Pro
298 100 105 110
300 Lys Cys Gly Ala Ala Ser Asp Leu Pro Ile Thr Leu Trp Ser His Pro
301 115 120 125
303 Ala Gln Gly Val Lys Gln Ile Ile Asn Asp Ile Ile Gln Met Gly Asp
304 130 135 140
306 Thr Thr Leu Ala Ala Ile Ala Leu Asn Gly Leu
307 145 150 155
310 <210> SEQ ID NO: 6
311 <211> LENGTH: 176
312 <212> TYPE: PRT
313 <213> ORGANISM: Mycobacterium tuberculosis
315 <400> SEQUENCE: 6
316 Met His Pro Leu Pro Ala Asp His Gly Arg Ser Arg Cys Asn Arg His
317 1 5 10 15
319 Pro Ile Ser Pro Leu Ser Leu Ile Gly Asn Ile Ser Ala Thr Ser Gly
320 20 25 30
322 Asp Met Ser Ser Met Thr Arg Ile Ala Lys Pro Leu Ile Lys Ser Ala
323 35 40 45
325 Met Ala Ala Gly Leu Val Thr Ala Ser Met Ser Leu Ser Thr Ala Val
326 50 55 60
328 Ala His Ala Gly Pro Ser Pro Asn Trp Asp Ala Val Ala Gln Cys Glu
329 65 70 75 80
331 Ser Gly Gly Asn Trp Ala Ala Asn Thr Gly Asn Gly Lys Tyr Gly Gly
332 85 90 95
334 Leu Gln Phe Lys Pro Ala Thr Trp Ala Ala Phe Gly Gly Val Gly Asn
335 100 105 110
337 Pro Ala Ala Ala Ser Arg Glu Gln Gln Ile Ala Val Ala Asn Arg Val
338 115 120 125
340 Leu Ala Glu Gln Gly Leu Asp Ala Trp Pro Thr Cys Gly Ala Ala Ser
341 130 135 140
343 Gly Leu Pro Ile Ala Leu Trp Ser Lys Pro Ala Gln Gly Ile Lys Gln
344 145 150 155 160
346 Ile Ile Asn Glu Ile Ile Trp Ala Gly Ile Gln Ala Ser Ile Pro Arg
347 165 170 175
353 <210> SEQ ID NO: 7
354 <211> LENGTH: 154
355 <212> TYPE: PRT
356 <213> ORGANISM: Mycobacterium tuberculosis
358 <400> SEQUENCE: 7
359 Met Thr Pro Gly Leu Leu Thr Thr Ala Gly Ala Gly Arg Pro Arg Asp

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 11/01/2006
PATENT APPLICATION: US/09/445,289F TIME: 11:44:50

Input Set : A:\60261499.app
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:11; Xaa Pos. 9,4
Seq#:38; Xaa Pos. 13,18
Seq#:41; N Pos. 9,15,21
Seq#:60; Xaa Pos. 14
Seq#:61; Xaa Pos. 7,8
Seq#:62; Xaa Pos. 8

VERIFICATION SUMMARY

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Input Set : A:\60261499.app

Output Set: N:\CRF4\11012006\I445289F.raw

L:584 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:1280 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0
M:341 Repeated in SeqNo=38
L:1338 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:0
L:1686 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:0
L:1706 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:0
L:1722 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:0